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13. ABSTRACT (Maximum 200 words) The Ninth Solid Freeform Fabrication Symposium, held at The University of Texas in Austin on August 11-13, 1998, was attended by over 150 national and international researchers. Papers addressed SFF issues in computer software, machine design, materials synthesis and processing, and integrated manufacturing. Eighty-eight presentations were made, 72 oral presentations and 16 poster presentations. This represents the most presentations ever given at the SFF Symposium and reflects 11 percent growth in the oral presentations compared to last year, indicative of our attempt to provide "stand-up" opportunities for as many research presenters as possible. The diverse domestic and foreign attendees represented industrial users, SFF machine manufacturers, universities, and government. The excitement generated at the Symposium reflects the participants' total involvement in SFF and the future technical health of this growing technology. The Symposium organizers look forward to its being a continuing forum for technical exchange among the expanding body of researchers involved in SFF. In fact, we currently have just over 100 abstracts received for the 1999 SFF Symposium.				
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End of Fiscal Year Letter - ONR Grant N00014-99-1-0209
Solid Freeform Fabrication Symposium -1998
David L. Bourell, PI

A. Description of the Technical Research or Development Goals: This grant helped to underwrite the publication expenses associated with the Ninth Solid Freeform Fabrication (SFF) Symposium. The symposium took place on August 11-13, 1998 in Austin, Texas at the University of Texas.

It included papers on computer interfaces with SFF, materials processing and properties associated with SFF and machine design and requirements for SFF.

B. Significant Research or Development results During the Past Year: The Ninth Solid Freeform Fabrication Symposium, held at The University of Texas in Austin on August 11-13, 1998, was attended by over 150 national and international researchers. Papers addressed SFF issues in computer software, machine design, materials synthesis and processing, and integrated manufacturing. Eighty eight presentations were made, 72 oral presentations and 16 poster presentations. This represents the most presentations ever given at the SFF Symposium and reflects 11 percent growth in the oral presentations compared to last year, indicative of our attempt to provide "stand-up" opportunities for as many research presenters as possible. The diverse domestic and foreign attendees represented industrial users, SFF machine manufacturers, universities, and government. The excitement generated at the Symposium reflects the participants' total involvement in SFF and the future technical health of this growing technology. The Symposium organizers look forward to its being a continuing forum for technical exchange among the expanding body of researchers involved in SFF. In fact, we currently have just over 100 abstracts received for the 1999 SFF Symposium.

The Symposium was again organized in a manner to allow the multi-disciplinary nature of the SFF research to be presented coherently, with various sessions emphasizing computer issues, machine topics, and the variety of materials aspects of SFF. This year, the three-day event was completely composed of individual oral presentations (no panel discussions/presentations) to accommodate the demand for this dissemination format. This was enhanced by increasing the afternoon parallel sessions to three from two for previous years. We believe that documenting the constantly changing state of SFF art as represented by these Proceedings will serve both the people presently involved in this fruitful technical area as well as the large flux of new researchers and users entering the field.

We are pleased to report that the SFF Symposium attracted a large number of young scientists this year. We had 51 students attend this year, approximately 30% of the entire meeting. Participants represented 37 universities (12 international universities), 30 industries and 6 national labs and government agencies. The Organizing Committee has always valued the role of technical meetings as a venue for graduate students in research. We strive to make the conference affordable and therefore accessible to students. The 1998 meeting registration cost of \$100 for students reflected this. Non-student cost was \$350.

Information on the SFF Symposium was made available through the worldwide web at <http://lff.me.utexas.edu/>. On-line registration forms, hotel information, general information brochure, proceedings order forms, maps, and previous years' talk titles are all available. The symposium email address is sffsymp@uts.cc.utexas.edu.

C. Plans for Next Year's Research or Development: Plans are currently underway for organization of the Tenth Solid Freeform Fabrication Symposium. The dates are August 9-11, 1999. The Call for Papers has gone out with an abstract deadline of April 15. We currently have received over 100 abstracts for the 1999 SFF Symposium, representing authors from 12 countries, 41 universities (17 international) and 21 industries/national labs.

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